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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/887,747	06/21/2001	Mihaela Van Der Schaar	US 000168	7494

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS  
P.O. BOX 3001  
BRIARCLIFF MANOR, NY 10510

EXAMINER

LEE, RICHARD J

ART UNIT PAPER NUMBER

2613

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/887,747	VAN DER SCHAAR ET AL.	
	Examiner	Art Unit	
	Richard Lee	2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 13 July 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5, 7-19, 21-31, 33-43, 45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 7-19, 21-31, 33-43, 45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 July 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3, 5, 7-19, 21-31, 33-43, and 45 are rejected under 35 U.S.C. 102(e) as being anticipated by Chen et al of record (6,263,022).

Chen et al discloses a system and method for fine granular scalable video with selective quality enhancement as shown in Figures 2 and 3, and the same method, system, and apparatus as claimed in claims 1-3, 5, 7-19, 21-31, 33-43, and 45 for improving the transmission efficiency of an original video signal transmitted as a plurality of frames, the frames containing the video signal encoded in a base layer and an enhancement layer wherein at least one element of the enhancement layer is selectively enhanced by designating the at least one selected element to have a higher priority of transmission (i.e., the bitplanes of upwardly shifted macroblock or block of the enhancement layer are selectively coded and transmitted with higher priority, see column 5, line 54 to column 7, line 6, column 13, lines 46-67), comprising the same means for transmitting a first set of criteria (i.e., the bit planes of blocks or macroblocks identified as visually more important are being upwardly shifted, and the shift factor used to identify the shifting unit level is considered the first set of criteria, see column 6, line 41 to column 7, line 35) for one of the frames; means for transmitting an indicator (i.e., shifting factor and mode indicator, see column 4, lines 10-22, column 6, line 41 to column 7, line 35, column 13, lines 46-66) that causes the first set of criteria to be used for a subsequent one of the frames if a second

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set of criteria for the subsequent one of the frames is substantially the same as the first set of criteria (i.e., the bitplanes of a subsequent block or macroblock identified as visually more important is similarly upwardly shifted as indicated by a shift factor (i.e., second set of criteria), and the same shift factor used to identify the shift unit level from the first set of criteria is therefore used for the subsequent one of the frames, thereby providing an indicator that causes the first set of criteria to be used for a subsequent one of the frames if a second set of criteria for the subsequent one of the frames is substantially the same as the first set of criteria, see column 6, line 41 to column 7, line 35); wherein the first set of criteria includes at least one enhancement factor value, wherein the at least one enhancement value is applied and corresponds to each element within in the enhancement layer, the at least one enhancement factor value is power of two (i.e., the shift factor values provide the enhancement factor value, see column 4, lines 10-22, column 6, line 53 to column 7, line 24, column 13, lines 46-67); the first set of criteria includes position, size and enhancement factor value, wherein the position is selected with respect to a known point (i.e., the position and size of blocks/macroblocks, and shifting factor (enhancement factor value) indicating higher priority thereby enhancing the image (see column 6, line 53 to column 7, line 6, column 8, lines 6-25)); wherein the first set of criteria includes at least a second indicator (i.e., flag at the beginning of each block, see column 7, lines 13-18) that indicates a corresponding known value, the known value is selected from the group consisting of position, displacement vector, size, and enhancement factor, wherein the indicator is substantially the same as the at least a second indicator; wherein the at least one element comprises a plurality of pixels in an array having an equal number of rows and columns, wherein the number of rows is selected from the group consisting of 2, 3, 4, 8, 16 (see column 6, line 53 to column 7, line 6,

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column 8, lines 6-25); wherein the enhancement layer is fine granular scalability encoded (see column 2, lines 43-60, column 8, lines 32-40); means for receiving the first set of criteria for the one of the frames and the indicator and means for applying the first set of criteria to the subsequent one of the frames (see column 14, lines 1-24).

3. The applicants argued at pages 15-17 of the amendment filed July 13, 2005 that "... None of these ways involves transmitting an indicator that causes a first set of criteria transmitted for a frame to be used for a subsequent frame if a second set of criteria for the subsequent frame is substantially the same as the first set of criteria, as claimed ... Chen describes a flag that is used at the beginning of each block to indicate if the current bit-plane of the whole block is zero or not ... the flag in Chen does not causes a first set of criteria transmitted for a frame to be used for a subsequent frame if a second set of criteria for the subsequent frame is substantially the same as the first set of criteria, as claimed ... Limiting the range of shifting factors has nothing to do with transmitting an indicator that causes a first set of criteria transmitted for a frame to be used for a subsequent frame if a second set of criteria for the subsequent frame is substantially the same as the first set of criteria, as claimed ... Chen describes determining shifting factors solely as a function of the base layer video and other non-enhancement data related information so that the shifting factors need not to be sent at all. This has nothing to do with transmitting an indicator that cause a first set of criteria transmitted for a frame to be used for a subsequent frame if a second set of criteria for the subsequent frame is substantially the same as the first set of criteria, as claimed ... Chen describes using binary and gray-level alpha images for guiding the location and amount of bit-plane shifting ... the adaptive quantization controller of Chen does not operate to transmit a first set of criteria for one of the frames and to transmit an indicator that

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causes the first set of criteria to be used for a subsequent frame if a second set of criteria for the subsequent frame is substantially the same as the first set of criteria, as claimed ...". The Examiner respectfully disagrees. Though Chen may teach various features not pertaining to the claimed invention, Chen nevertheless anticipates the claimed invention. Chen teaches the particular modification of the data field within the adaptive controller by including shifting factors and a mode indicator indicating the shifting factor, and transmitting mode indicator indicating the shift factors to a receiver so that the encoded data may be decoded accordingly (see column 3, lines 41-62, column 4, lines 7-22, column 6, line 41 to column 7, line 35, column 13, line 46 to column 14, line 13). Though Chen teaches that shift factors need not be sent at all in certain instances, the mode indicator indicating the shift factor in general is sent, such as in high priority cases (see column 6, line 41 to column 7, line 35). And since Chen teaches that visually more important blocks are to be upwardly shifted as indicated by a shift factor (mode indicator), it is considered inherent that if the first set of criteria is substantially similar to the second set of criteria (i.e., the first and second set of criteria being visually more important blocks or macroblocks), then the indicator (i.e., mode indicator, see column 4, lines 10-22, column 6, line 41 to column 7, line 6 of Chen) will be transmitted to the decoder thereby causing the first set of criteria to be used for a subsequent one of the frames if a second set of criteria for the subsequent one of the frames is substantially the same as the first set of criteria, as claimed. In other words, if two consecutive frames (each frame corresponding to the first and second set of criteria, as claimed) within Chen are deemed to be more visually important thereby requiring the upward shifting of the bit-planes of the macroblocks or blocks to be coded with higher priority, then the same mode indicator used with the first set of criteria for one frame will

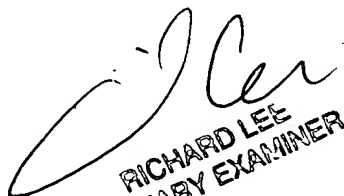
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similarly be used with the second set of criteria for a subsequent frame, and such mode indicator is transmitted to a decoder for decoding of the encoded data (see column 6, line 41 to column 7, line 35, column 13, line 46 to column 14, line 13).

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Lee whose telephone number is (571) 272-7333. The Examiner can normally be reached on Monday to Friday from 8:00 a.m. to 5:30 p.m, with alternate Fridays off.

  
RICHARD LEE  
PRIMARY EXAMINER

Richard Lee/rl

9/30/05

